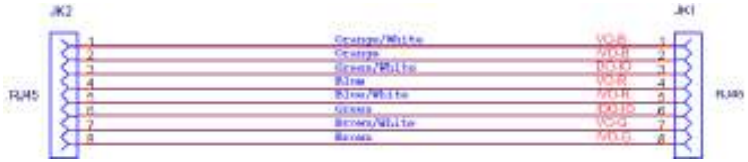
P. CAT5 cable pin assignment



33M Single USB Console
8/16 Port CAT5 KVM Switch
User Manual

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† Specification subject to change without notice.

33M Single USB Console 8/16 port CAT5 KVM Switch
User Manual
Version 0.7.6 2008-06-04

A. Package Content

Any one of 33M Single USB Console CAT5 KVM Switch contains the following items:

- Main switch 1 pcs.
- Power Adaptor 1 pcs.
- CAT5 cable 1 pcs.
- User manual 1 pcs.
- Firmware upgrade Cable 1 pcs.

B. Introduction

This series' products deliver a host of new features and latest technologies, making it another standout in the single console CAT5 KVM switches. It can access and control up to 16/8 computers through 1 set of USB keyboard, mouse and monitor console from up to 33 meters away via the CAT5 cable. With cascade configuration can control up to 256 computers. The flash upgrade feature allows you to update software through a standard RS-232 serial port. OSD, Hotkey and Push button are provided for convenient computer selection and system maintenance. This series also support the remote console and local console that is selected by push button.

C. System Requirement

C.1 Console

C.1.1 A VGA monitor may compatible with the highest resolution that you are using on any computer s connected to the main switch.

C.1.2 Mouse and Keyboard with USB interface

C.2 Computer

C.2.1 With HDB-15 Video port

C.2.2 6-pin Mini-DIN type PS2 mouse and

O. Specification:

Product Specifications		Description
Front Panel	Online LED	16/8 Red LEDs
	Selected LED	16/8 Green LEDs
	I/O port select button	16/8 Push Buttons
	Power LED	1 Red LED, Power Indicator
	Console LED	1 Green LED, Console Indicator
	Link LED	1 Red/Green LED, Remote Console Link Status
	Console Select Button	1 Push Button
	F/W Upgrade Port	1 RJ 11, Firmware upgradeable via this port
	F/W Upgrade slide switch	1 Slide Switch Off: Default normal position Boot: Set when F/W was failed
	Reset Switch	Reset System
Back Panel	Power supply	DC 5V, 2A
	Remote console port	RJ-45, is able to connecting a KMX2102 or CMX2102, a Remote console switch.
	Local Console: Monitor Keyboard Mouse	 1 VGA HDB-15 pin female 1 USB type A female 1 USB type A female
	I/O ports	16/8 RJ45, to 16/8 computers
Remote Video Resolution		Up to 1600 x 1200@60Hz in 33 meters.
Video DDC2B and EDID		Real time supported
Cable material		CAT5/5+/6
Cable transmission distance		Up to 33 meters
Dimension(W*D*H)		265 x 145 x 42 mm
Weight		1200g / 1050g
Housing		Metal
Operation and storage parameters	Operation temperature	32 to 104 deg.F (0 ~ 40 deg.C)
	Storage Temperature	-4 to 140 deg.F(-20 ~ 60 deg.C)
	Humidity	0-80% non-condensing relative humidity

details.

L.2.3 F5: to start auto scan
L.2.4 F10: to log out
L.2.5 ESC: to quit OSD
L.2.6 Up and down arrow key to move cursor bar
L.2.7 Enter: to select the port where cursor located and exit OSD

M. Administrator Operation

In Admin menu, there are items can be invoked:

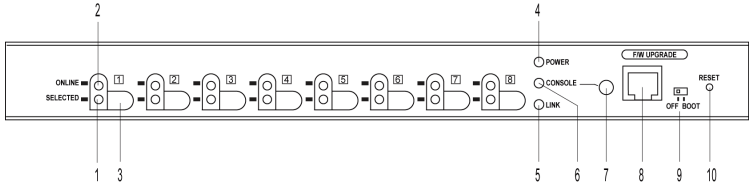
M.1 Set Station Name: max 16 characters
M.2 Set Port Name: max 16 characters
M.3 Set Server Name: max 16 characters
M.4 Add User: max 8 accounts, exclude built-in admin account. Max 16 characters for user name and password
M.5 Delete User
M.6 Set User Access Right: grant access right to the ports of computer
M.7 Firmware Upgrade: to set the station to get into firmware upgrade mode.

N. Sun Keyboard Emulation

PC Keyboard	Sun Keyboard	PC Keyboard	Sun Keyboard
[ctrl],[z]	Help	[ctrl],[7]	Undo
[ctrl],[1]	Stop	[ctrl],[8]	Copy
[ctrl],[2]	Props	[ctrl],[9]	Paste
[ctrl],[3]	Front	[ctrl],[0]	Cut
[ctrl],[4]	Open	Left-Window	Left-meta
[ctrl],[5]	Find	Right-Window	Right-meta
[ctrl],[6]	Again	Application	Compose

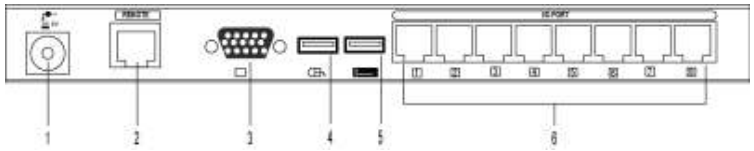
keyboard port, or USB type mouse and keyboard port.

D. Main Switch Front View



1 Computer Port 1 to 8/16 selected LED : Light on to indicate the selection of corresponding connected computer
2 Computer Port 1 to 8/16 Online LED : Light on to indicate the power on status of corresponding connected computer
3 Computer Port 1 to 8/16 selection button: push and release the button to select a PC
4 Power LED
5 Link LED: light on when the remote console is linked.
6 Console LED: light on when the remote console is selected.
7 Console selection button: push and release button to select between local console and remote console.
8 Firmware Upgrade Connector
9 Firmware upgrade slide switch: Set to BOOT enable the firmware upgrade again when fail. Normally it should be set to OFF.
10 Reset button: push the button to restart the KVM switch

E. Main Switch Rear View



1. DC Adaptor port
2. Remote Console port: RJ45,
3. Console VGA port: HDB-15 female
4. Console USB type mouse port
5. Console USB type keyboard port
6. Computer port 1 to 8/16: RJ45

F. Installation Description – Single Level

Refer to installation diagram – single level, to install the system in the following sequence:

1 Connect a USB type mouse, a USB type keyboard, and a VGA type monitor to the main switch; then power on the monitor.

2 Plug in power adaptor, the power LED will light on.

3 This step could be skipped if no remote console is needed. Connect remote mouse, remote keyboard, remote VGA type monitor, remote sever, and remote console unit to the remote console port of main switch. (See remote console unit user manual for details)

4 For each computer/ sever that connected to the main switch:

- 4.1 Connect the computer with PS/2 or USB interface computer End Dongle depend on the keyboard/ mouse interface.
- 4.2 Connect the PS/2 or USB interface computer End Dongle to the main switch using Cat5 cable.
- 4.3 Power on the computer

5 A Login OSD will be in the middle of the screen when the main switch is power on. The user need to input the name and password, the default

OSD mode		mode
Exit OSD mode	[scroll lock],[scroll lock],[Enter]	– Quit OSD window
Port Switching setting	[scroll lock],[scroll lock],[n],[enter]	– Switch to port n. n = 1~16/8.
Enter Auto Scan mode	[scroll lock],[scroll lock],[‘S’ or ‘s’]	– start auto-scan. Type ‘Esc’ or ‘Space’ key will stop the scan
Toggle Beeper setting	[scroll lock],[scroll lock],[‘B’ or ‘b’]	– Toggle beeper setting.
Toggle Hot-key head setting	[scroll lock],[scroll lock], [‘H’ or ‘h’]	– Toggle hot-key head to [ctrl], [ctrl].

L. OSD Operation

There are two levels of users on OSD operation: administrator and user. Only administrator can manipulate administrator operation via admin menu. This section only describes user OSD operation. The OSD window can only support keyboard manipulation, do not support any mouse operation.

L.1 Normally in OSD operation, ESC key means quit without execution, Enter key means select and execution.

- L.1.1 After getting into OSD mode, user can see a list of ports that the logon user is allowed to access. User can use up and down arrow key, or page up and page down key to move cursor bar among the port list.

L.2 During the port list screen, user can hit the following key

- L.2.1 F1: to user menu. Within user menu, user can set his preference of operation and view the station/dongle information.
- L.2.2 F2: to Administration menu. See Administrator Operation Section for more

J.2 Console selection button should be set to OFF for local console, and the console LED will NOT light on.

J.3 Follow the power on sequence in installation description section.

J.4 User can manipulate main switch via button, slide switch, hotkey or OSD operation.

J.5 Refer to main switch front and rear view section for button and switch operation.

K. Hotkey Operation

K.1 The default Hot-key command sets are listed in below table.

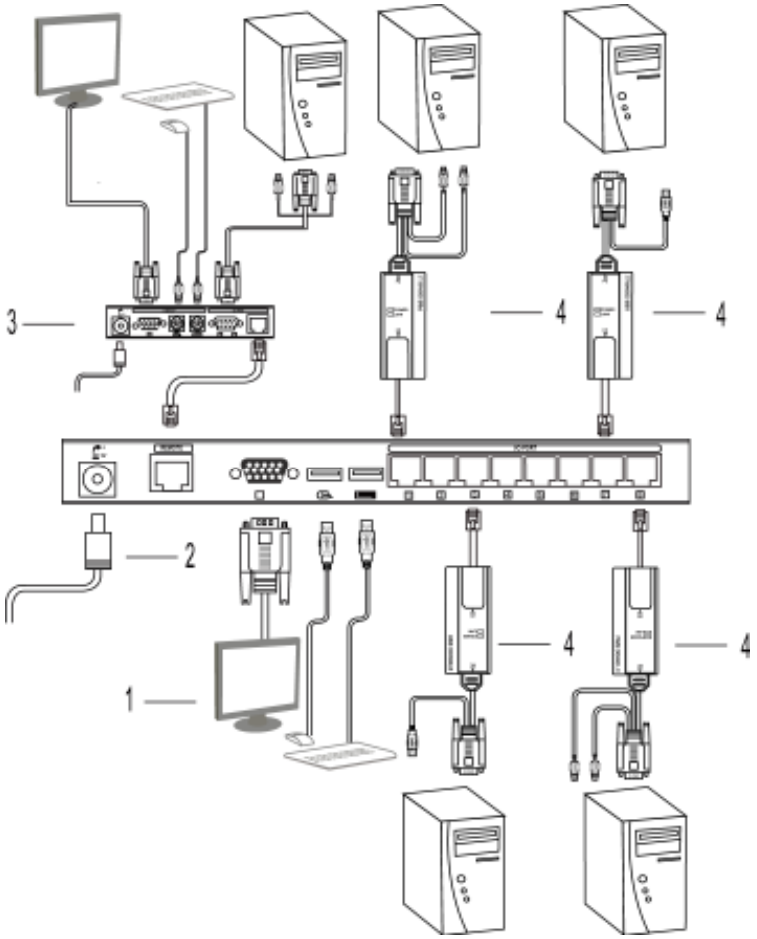
Command Function	Key Sequence	Description
Activate or enter OSD mode	[ctrl],[ctrl]	– Enter OSD mode
Exit OSD mode	[ctrl],[ctrl],[Enter]	– Quit OSD mode
Port Switching setting	[ctrl],[ctrl],[n],[enter]	– Switch to computer port n. n = 1~16/8.
Enter Auto Scan mode	[ctrl],[ctrl],[‘S’ or ‘s’]	– Start auto-scan. Type ‘Esc’ or ‘Space’ will stop the scan
Toggle Beeper setting	[ctrl],[ctrl],[‘B’ or ‘b’]	– Toggle beeper setting
Toggle Hot-key Head setting	[ctrl],[ctrl],[‘H’ or ‘h’]	– Toggle hot-key head to [scroll lock], [Scroll lock].

K.2 The alternative Hot-key command sets are listed in below table.

Command Function	Key Sequence	Description
Activate or enter	[scroll lock],[scroll lock]	– Enter OSD

username is ‘admin’, and default password is [enter], i.e., hit [enter] key after typing ‘admin’ into the username form.

G. Installation Diagram – Single Level

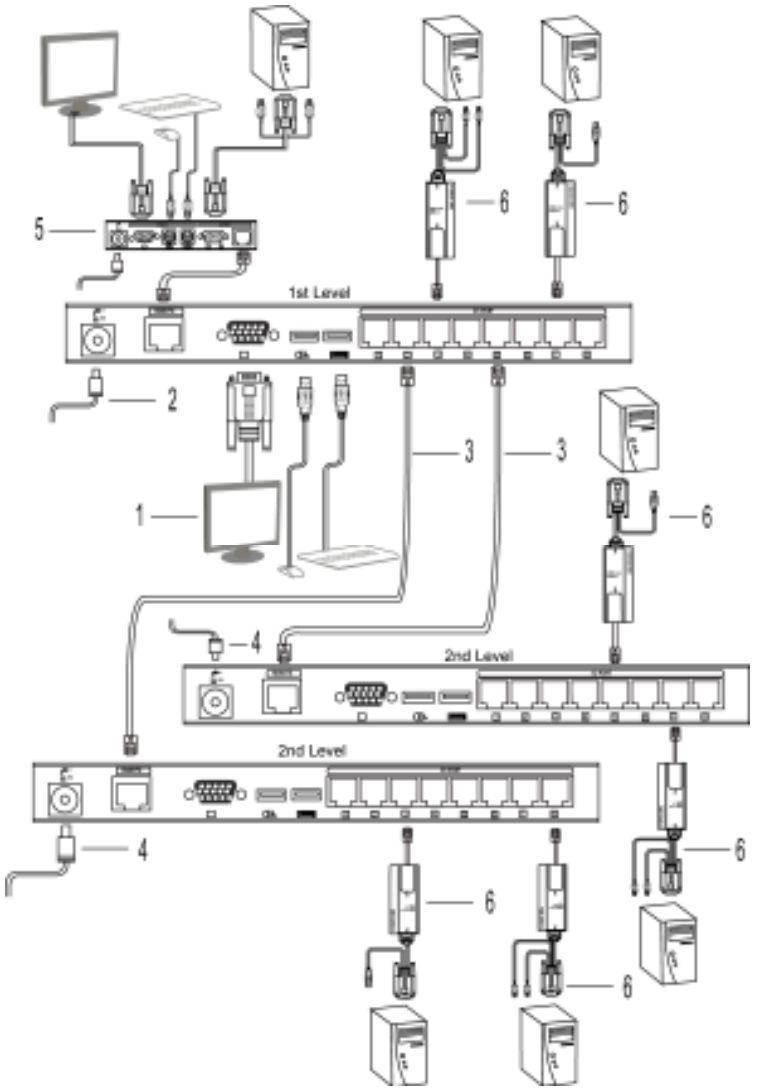


H. Installation Description – 2 levels configuration

Refer to installation diagram – 2 levels, to install the system in the following sequence:

1. Connect a USB type mouse, a USB type keyboard, and a VGA type monitor to the main switch; then power on the monitor.
2. Plug in power adaptor of 1st level main switch, the power LED will light on.
3. Cascading 2nd level main switch to 1st level. For each 2nd level main switch,
   - 3.1 Using CAT5 cable to plug in to the remote console port,
   - 3.2 The other side of CAT5 cable to plug in the one of I/O port of 1st level main switch.
4. Plug in power adaptor of each 2nd level main switch, the power LED will light on.
5. This step could be skipped if no remote console is needed. Connect remote mouse, remote keyboard, remote VGA type monitor, remote sever, and remote console unit to the remote console port of main switch. (See remote console unit user manual for details)
6. For each computer/ sever that connected to each main switch:
   - 6.1 Connect the computer with PS/2 or USB interface computer End Dongle depend on the keyboard/ mouse interface.
   - 6.2 Connect the PS/2 or USB interface computer End Dongle to a main switch using Cat5 cable.
   - 6.3 Power on the computer
7. A Login OSD will be in the middle of the screen when the main switch is power on. The user need to input the name and password, the default username is ‘admin’, and default password is [enter], i.e., hit [enter] key after typing ‘admin’ into the username form.

I. Installation Diagram – 2 Levels (Cascading)



J. Operation

In normal operation,

- J.1 Firmware Upgrade Slide Switch should be set to OFF.